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Discussing Controversial Topics in the Technology Classroom: Benefits, Strategies, and Challenges

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Abstract
Using controversial topics for teaching and learning has several benefits identified in the literature. Skills such as applying knowledge to real world applications, critical judgment and evaluation, social and ethical considerations, and oral and written communication are important learning outcomes of this practice. Utilizing several models of teaching and learning, this presentation will present the benefits of discussing controversial topics in the classroom, as well as strategies and challenges of handling these types of discussions with technology students.

Disciplines
Agriculture | Bioresource and Agricultural Engineering | Engineering Education | Higher Education | Science and Mathematics Education

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Need: Using controversial topics for teaching and learning has several benefits identified in the literature. Skills such as applying knowledge to real world applications, critical judgment and evaluation, social and ethical considerations, and oral and written communication are important learning outcomes of this practice. Utilizing several models of teaching and learning, this presentation will present the benefits of discussing controversial topics in the classroom, as well as strategies and challenges of handling these types of discussions with technology students.

Overview: Although students often consider topics in science and technology to be objective and unchanging, controversies have existed for hundreds of years in most fields of study. Limiting students the opportunity to debate controversial topics in the discipline denies students the chance to critically analyze, think, reason, and justify their thoughts. However, instructors may have some hesitation about introducing controversial ideas in the classroom for several reasons. This presentation will give examples of controversial topics that might be discussed in the technology classroom, the benefits of these types of discussions for student learning, strategies for managing the challenges of classroom discussion and debate on controversial topics in the field of technology.

Major Points:

- Controversial topics in the field of technology
- Benefits of using controversial topics in teaching and learning
- Strategies for effective management of classroom debate and discussion
- Handling the challenges of integrating controversial concepts into technology coursework

Summary: Attendees will learn how to use discussion and debate of controversial topics in the technology classroom to increase the understanding and engagement of students. Strategies and best practices for integrating controversial topics into technology-based courses will be shared.